

Prostate Cancer in Virginia

Risk Factors¹

- The strongest risk factors for developing prostate cancer are age (the majority of cases occur in men 65 years of age and older), race/ethnicity (men of African descent are at especially high risk of developing and dying from the disease), and family history.
- Dietary factors may also be associated with risk of prostate cancer (animal fat with increased risk and lycopene—an antioxidant found in tomatoes and other red/pink fruits and vegetables—with decreased risk). Being obese may predispose men to dying from the disease.



Warning Signs and Symptoms¹

- There are often no symptoms in the early stages of prostate cancer.
- When symptoms occur, they often include urinary problems.
- Late-stage disease that has spread to the bone may cause back, chest, or pelvic pain.

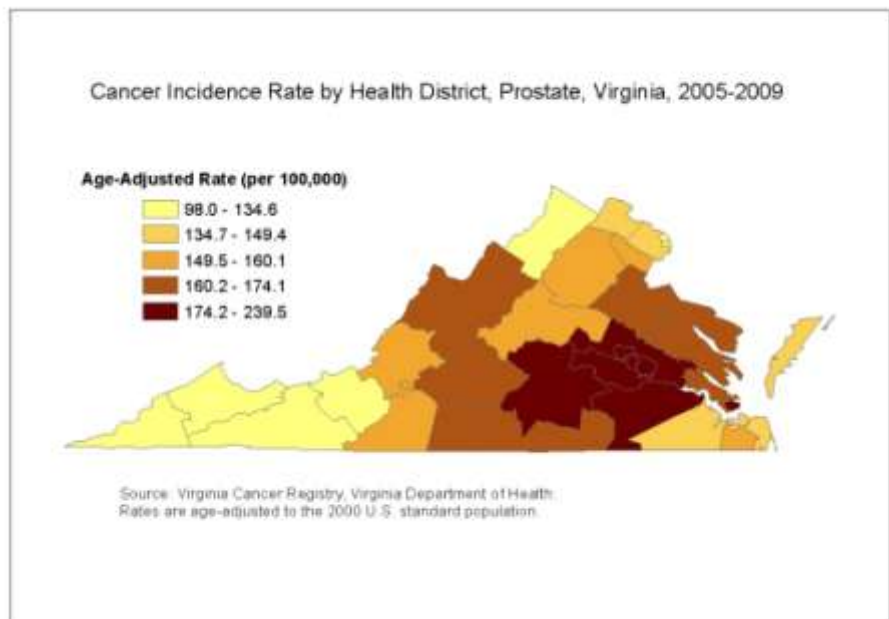
Early Detection¹

- There is currently not strong evidence to recommend routine screening.
- Screening by PSA blood test and digital rectal exam is an option to consider for average-risk men beginning at age 50 (earlier for high-risk men including men of African descent and those with a family history). Men should discuss prostate screening with their doctors.

Prostate Cancer Facts

- Prostate cancer is the most commonly diagnosed cancer (excluding non-melanoma skin cancer) and the second leading cause of cancer death among men in the United States. One in six men will be diagnosed with prostate cancer during his lifetime.¹
- Over the 2005-2009 time period, the incidence rate of prostate cancer among men in Virginia was 157.7 cases per 100,000.² (U.S. rate=154.8 cases per 100,000)³
- Figure 1 shows incidence rates of prostate cancer by health district in Virginia. Chesterfield, Crater, and Hampton had the highest incidence rates of prostate cancer among the 35 health districts.²

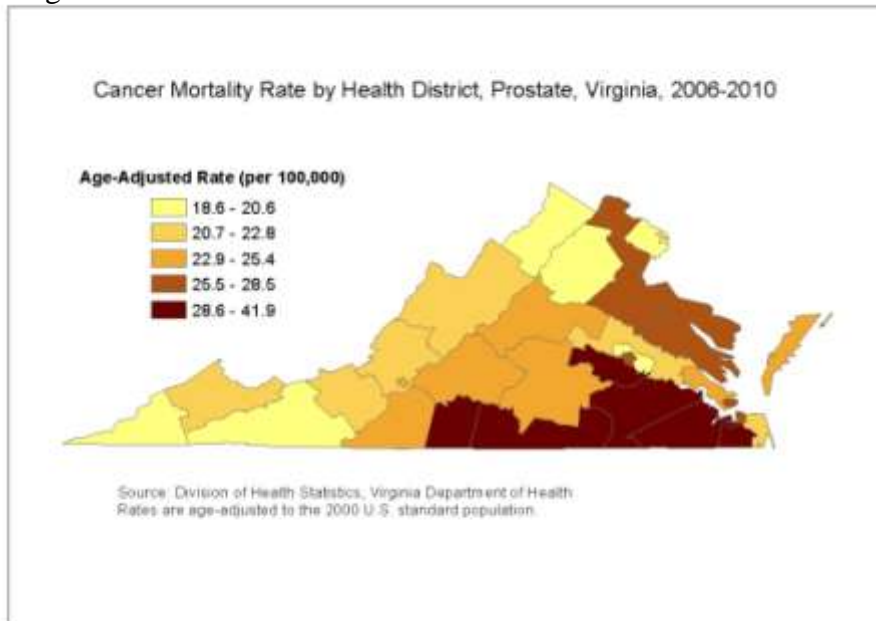
Figure 1



Prostate Cancer in Virginia

- Over the 2006-2010 time period, the mortality rate from prostate cancer among men in Virginia was 24.1 deaths per 100,000.⁴ (U.S. rate=22.3 deaths per 100,000)⁵

Figure 2



- Figure 2 shows prostate cancer mortality rates by health district in Virginia. Crater, Western Tidewater, and Portsmouth had the highest mortality rates from prostate cancer among the 35 health districts.⁴

- Incidence rates were over 70% higher in African-American men compared to white men in Virginia.²

- Mortality rates were about 2.5 times greater in African-American men compared to white men in Virginia.⁴

- Prostate cancer has a five-year relative survival rate of

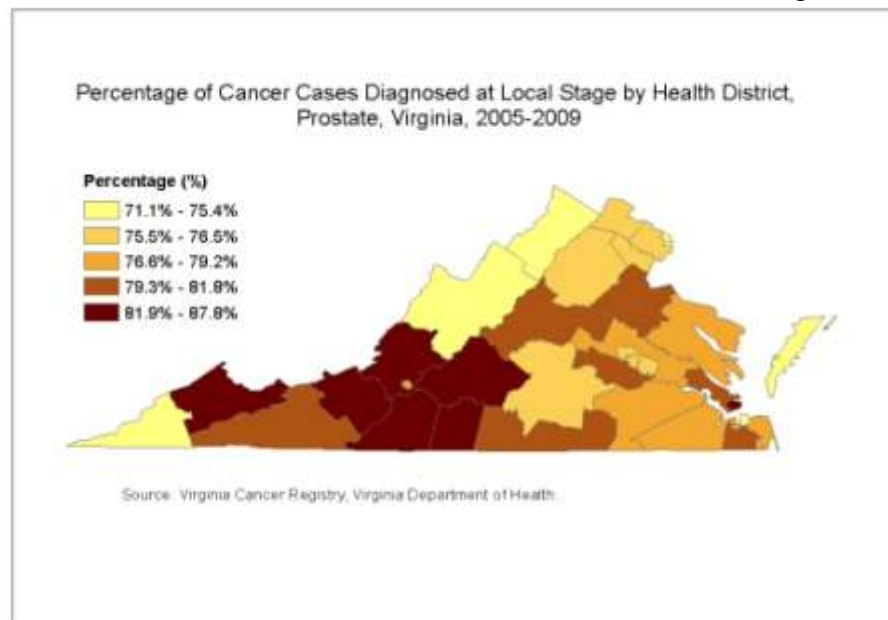
about 100 percent if diagnosed in its earliest (local) stage.¹ In Virginia, 79 percent of prostate cancer diagnosed was local stage.²

- Figure 3 shows the percentage of prostate cancer diagnosed local stage by health district in Virginia. Eastern Shore, Arlington, and Norfolk had the lowest percentages of prostate cancer cases diagnosed local stage among the 35 health districts.²

- The percentage of prostate cancer cases diagnosed local stage was 79% for both whites and African-Americans in Virginia.²

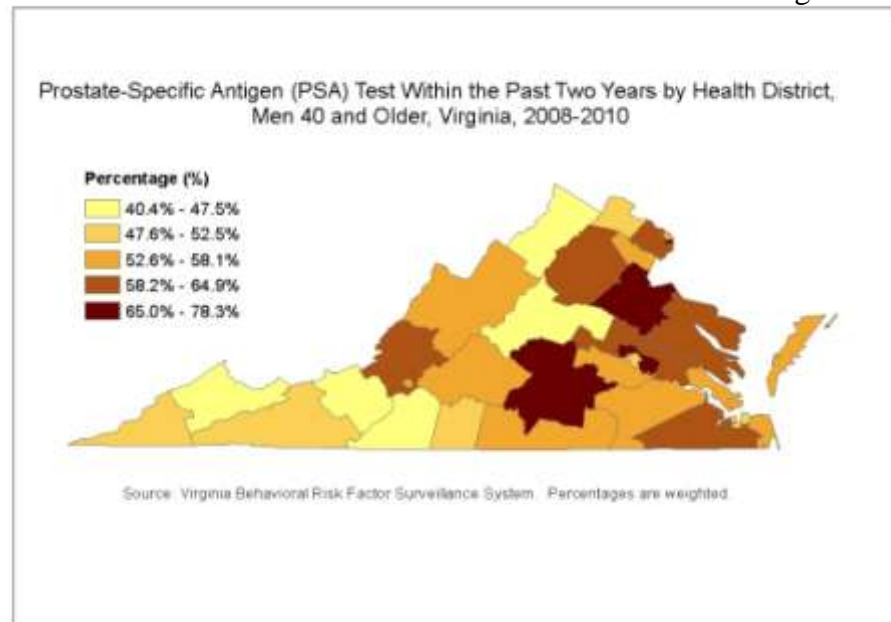
- According to 2010 health behavior survey data, 55% of Virginia men 50 years and older reported having had a PSA screening test in the previous two years (U.S. average=53%).⁶

Figure 3



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Figure 4



- Figure 4 shows the prevalence of PSA screening testing by health district in Virginia. Cumberland Plateau, West Piedmont, and Loud Fairfax had the lowest percentages of PSA screening among the 35 health districts.⁷
- PSA screening rates were lower among men who were less educated and uninsured.⁷
- In Virginia in 2010, there were 1,614 inpatient hospitalizations for prostate cancer, at a total cost of over \$62 million.

The average length of stay was 2.2 days and the average charge per stay was \$38,483.⁸

¹ American Cancer Society *Cancer Facts & Figures 2009* (<http://www.cancer.org>)

² Virginia Cancer Registry. Based on combined data from 2005-2009. Rates are age-adjusted to the 2000 U.S. standard population.

³ Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA (eds). SEER Cancer Statistics Review, 1975-2009 (Vintage 2009 Populations), National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2009_pops09/, based on November 2011 SEER data submission, posted to the SEER web site, April 2012. Based on combined data from 2005-2009. Rates are age-adjusted to the 2000 U.S. standard population.

⁴ VDH Division of Health Statistics. Based on combined data from 2006-2010. Rates are age-adjusted to the 2000 U.S. standard population.

⁵ Miniño AM, Murphy SL, Xu JQ, Kochanek KD. Deaths: Final data for 2008. National vital statistics reports; vol 59 no 10. Hyattsville, MD: National Center for Health Statistics. 2011. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr59/nvsr59_10.pdf. National rate is the 2008 age-adjusted rate, which is comparable to the state five-year interval midpoint.

⁶ Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2010. (<http://apps.nccd.cdc.gov/brfss>) Accessed 6/27/12.

⁷ Virginia Behavioral Risk Factor Surveillance System. Based on 2008 and 2010 (pooled) data. Percentages are population-weighted.

⁸ VDH Virginia Health Information Hospital Discharge Patient-Level Dataset.